

## What Is Claimed Is:

- 1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:
  - (a) a nucleotide sequence encoding residues -20 to 160 of SEQ ID NO:2;
  - (b) a nucleotide sequence encoding residues -19 to 160 of SEQ ID NO:2;
  - (c) a nucleotide sequence encoding residues 1 to 160 of SEQ ID NO:2;
- (d) a nucleotide sequence encoding the IL-20 polypeptide having the complete amino acid sequence encoded by the human cDNA in clone HTSGS30;
- (e) a nucleotide sequence encoding the IL-20 polypeptide having the complete amino acid sequence excepting the N-terminal methionine encoded by the human cDNA in clone HTSGS30;
- (f) a nucleotide sequence encoding the mature IL-20 polypeptide having the amino acid sequence encoded by the human cDNA in clone HTSGS30; and
- (g) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c), (d), (e) or (f), above.
- 2. The nucleic acid molecule of claim 1 wherein said polynucleotide comprises the complete nucleotide sequence in Figure 1 (SEQ ID NO:1).
- 3. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in Figure 1 (SEQ ID NO:1) encoding residues -19 to 160 of SEQ ID NO:2.
- 4. The nucleic acid molecule of daim-1 wherein said polynucleotide has the nucleotide sequence in Figure 1 (SEQ ID NO:1) encoding residues 1 to 160 in SEQ ID NO:2.
- 5. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence elected from the group consisting of:
- (a) a nucleotide sequence encoding residues n-160 of SEQ ID NO:2, where n is an integer in the range of -20 to 10;
- (b) a nucleotide sequence encoding residues -20-m of SEQ ID NO:2, where m is an integer in the range of 158 to 160;
- (c) a nucleotide sequence encoding residues n-m of SEQ ID NO:2, where n and m are integers as defined respectively in (a) and (b) above;
- (d) a nucleotide sequence encoding a polypeptide consisting of a portion of the complete IL-20 amino acid sequence encoded by the human cDNA in clone HTSGS30 wherein said portion excludes from 1 to about 30 amino acids from the amino terminus;
- (e) a nucleotide sequence encoding a polypeptide consisting of a portion of the complete IL-20 amino acid sequence encoded by the human cDNA in clone HTSGS30 wherein said portion excludes from 1 to about 3 amino acids from the carboxy terminus; and
  - (f) a nucleotide sequence encoding a polypeptide consisting of a portion of the complete

IL-20 amino acid sequence encoded by the human cDNA in clone HTSGS30 wherein said portion include a combination of any of the amino terminal and carboxy terminal deletions in (d) and (e), above.

- 6. The nucleic acid molecule of claim 1 wherein said polynucleotide comprises a complete nucleotide sequence of the human cDNA in clone HTSGS30.
- 7. The nucleic acid molecule of claim 1 wherein said polynucleotide comprises a nucleotide sequence encoding the complete amino acid sequence excepting the N-terminal methionine encoded by the human cDNA in clone HTSGS30.
- 8. The nucleic acid molecule of claim 1 wherein said polynucleotide comprises a nucleotide sequence encoding the mature polypeptide encoded by the human cDNA in clone HTSGS30.
- 9. An isolated nucleic acid molecule comprising a polynucleotide which hybridizes under stringent hybridization conditions to a polynucleotide having a nucleotide sequence identical to a nucleotide sequence in (a), (b), (c), (d), (e), (f) or (g) of claim 1 wherein said polynucleotide which hybridizes does not hybridize under stringent hybridization conditions to a polynucleotide having a nucleotide sequence consisting of only A residues or of only T residues.
- 10. An isolated nucleic acid molecule comprising a polynucleotide which encodes the amino acid sequence of an epitope-bearing portion of a IL-20 polypeptide having an amino acid sequence in (a), (b), (c), (d), (e) or (f) of claim 1.
- 11. The isolated nucleic acid molecule of claim 10, which encodes an epitope-bearing portion of a IL-20 polypeptide wherein the amino acid sequence of said portion is selected from the group of sequences in SEQ ID NO:2 consisting of: about Gln-21 to about Arg-29, about Gln-21 to about Gly-41, about Ser-24 to about Gln-32, about Arg-29 to about Pro-37, about Arg-52 to about Glu-60, about Arg-52 to about Met-69, about Glu-61 to about Met-69, about Asn-75 to about Val-86, about Ser-93 to about Trp-101, about Ile-105 to about Pro-113, about Met-132 to about Ser-140, about Arg-150 to about Pro-158, about Pro-156 to about Arg-164, about Gly-161 to about Met-169, and about Val-149 to about Ala-167.
- 12. A method of making a recombinant vector comprising inserting an isolated nucleic acid molecule of claim 1 into a vector.
  - 13. A recombinant vector produced by the method of claim 12.

- 14. A method of making a recombinant host cell comprising introducing the recombinant vector of claim 13 into a host cell.
  - 15. A recombinant host cell produced by the method of claim 14.
- 16. A method of producing an IL-20 polypeptide, comprising culturing the recombinant host cell of claim 15 under conditions such that said polypeptide is expressed and recovering said polypeptide.
- 17. An isolated IL-20 polypeptide comprising an amino acid sequence at least 95% identical to a sequence selected from the group consisting of:
  - (a) residues -20 to 160 of SEQ ID NO:2;
  - (b) residues -19 to 160 of SEQ ID NO:2;
  - (c) residues 1 to 160 of SEQ ID NO:2;
  - (d) the complete amino acid sequence effedded by the human cDNA in clone HTSGS30;
- (e) the complete amino acid sequence excepting the N-terminal methionine encoded by the human cDNA in clone HTSGS30; and
- (f) the amino acid sequence of the mature polypeptide encoded by the human cDNA in clone HTSGS30.
- An isolated polypeptide comprising an epitope-bearing portion of the IL-20 protein, wherein said portion is selected from the group consisting of: a polypeptide comprising amino acid residues from about Gln\21 to about Arg-29 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Gln-21 to about Gly-41 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Ser-24 to about Gln-32 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Arg-29 to about Pro-37 in SEO ID NO:2, a polypeptide comprising amino acid\residues from about Arg-52 to about Glu-60 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Arg-52 to about Met-69 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Glu-61 to about Met-69 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Asn-75 to about Val-86 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Ser-93 to about Trp-101 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Ile-105 to about Pro-113 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Met-132 to about Ser-140 in SEQ ID NQ:2, a polypertide comprising amino acid residues from about Arg-150 to about Pro-158 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Pro-156 to about Arg-164 in SEQ ID NO:2, a polypeptide comprising amino acid residues from about Gly-161 to about Met-169 in SEQ ID NO:2, and a polypeptide comprising amino acid residues from about Val-149 to about Ala-167 in SEQ ID NO:2.

- 19. An isolated antibody that binds specifically to a IL-20 polypeptide of claim 17.
- 20. An isolated polynucleotide encoding an amino acid sequence, wherein, except for at least one conservative amino acid substitution, said amino acid sequence is identical to a member selected from the group consisting of:
  - (a) residues -20 to \160 of SEQ ID NO:2;
  - (b) residues -19 to 160 of SEQ ID NO:2; and
  - (c) residues 1 to 160 of SEQ ID NO:2.
- An isolated polypeptide, wherein, except for at least one conservative amino acid substitution, said modified polypeptide comprises an amino acid sequence selected from the group consisting of:
  - (a) residues -20 to 160 of SEQ ID NO:2;
  - (b) residues -19 to 160 of SEQ ID NO:2; and
  - (c) residues 1 to 160 of SEQ ID NO:2.
- 22. An isolated nucleic acid molecule comprising a polynucleotide having a sequence at least 95% identical to a sequence selected from the group consisting of:
- (a) the nucleotide sequence of a portion of the sequence shown in Figure 1 (SEQ ID NO:1) wherein said portion comprises at least 50 contiguous nucleotides from nucleotide 103 to nucleotide 584;
- (b) the nucleotide sequence of a portion of the sequence shown in Figure 1 (SEQ ID NO:1) wherein said portion consists of nucleotides 1-500, 25-525, 50-550, 75-575, 100-600, 125-625, 150-650, 175-675, 200-700, 103-595, 103-590, 103-585, 103-580, 103-575, 103-570, 103-565, 103-560, 103-555, 103-550, 103-545, 103-540, 103-535, 103-530, 103-525, 103-520, 103-515 or 103-510; and
- (c) a nucleotide sequence complementary to any of the nucleotide sequences in (a) or (b), above.

